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BLANK ROME LLP 600 NEW HAMPSHIRE AVENUE, N.W. WASHINGTON, DC 20037			PARK, JOHN J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

CA

<b>Office Action Summary</b>	<b>Application No.</b> 10/698,943	<b>Applicant(s)</b> GRAVELLE, KELLY	
	<b>Examiner</b> John J. Park	<b>Art Unit</b> 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 15, 32, 45, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234).

Re claim 1, Imazuka disclose a gate system comprising a control center for ticket reservation, an automatic gate apparatus, a ticket vending machine (See Col. 2 Line 8-11) for issuing a magnetic ticket, and a ticket issuing terminal through a wireless communication. The ticket vending machine includes an insert port (See Col. 4 Line 62-67) for a fare collected by a user, an exit port (See Col. 5 Line 16-29) for an issuing wireless IC card or magnetic ticket to a user, and a CPU (Fig. 4) to control the vending machine.

However, Imazuka fails to teach an electronic toll collection device for paying toll at a toll facility.

Slavin et al. disclose an automatic toll collection system (See Col. 2 Line 57-67) operating in conjunction with transponders provided for sale to the public and pre-approved for a predetermined amount of toll credit.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the automatic toll collection system with transponders as taught by Slavin et al. into the teachings of Imazuka in order to purchase a transponder from a vending machine and process payment at any toll plaza that would be convenient toll fee transaction.

Re claim 15, Imazuka disclose a gate system comprising a control center for ticket reservation, an automatic gate apparatus, a ticket vending machine (See Col. 2 Line 8-11) for issuing a magnetic ticket, and a ticket issuing terminal through a wireless communication. The ticket vending machine includes an insert port (See Col. 4 Line 62-67) for a fare collected by a user, an exit port (See Col. 5 Line 16-29) for an issuing wireless IC card or magnetic ticket to a user, and a CPU (Fig. 4) to control the vending machine. A station control center of a central reservation center (See Fig. 5) is connected with a center communication controller that controls wireless communication (See Fig. 5; Col. 4 Line 29-38) with a ticket vending terminal for updating data of a wireless card.

However, Imazuka fails to teach an electronic toll collection device for paying toll at a toll facility.

Slavin et al. disclose an automatic toll collection system (See Col. 2 Line 57-67) operating in conjunction with transponders provided for sale to the public and pre-approved for a predetermined amount of toll credit.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the automatic toll collection system with transponders as taught by Slavin et al. into the teachings of Imazuka in order to purchase a transponder from a

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vending machine and process payment at any toll plaza that would be convenient toll fee transaction.

Re claim 32, Imazuka disclose a gate system comprising a control center for ticket reservation, an automatic gate apparatus, a ticket vending machine (See Col. 2 Line 8-11) for issuing a magnetic ticket, and a ticket issuing terminal through a wireless communication. The ticket vending machine includes a ticket processing terminal at a long-distance ticket vending window (See Fig. 4; Col. 4 Line 1-8) to display various data (Fig. 7) with additional purchasing function, an insert port (See Col. 4 Line 62-67) for a fare collected by a user, an exit port (See Col. 5 Line 16-29) for an issuing wireless IC card or magnetic ticket to a user, and a CPU (Fig. 4) to control the vending machine.

However, Imazuka fails to teach an electronic toll collection device for paying toll at a toll facility.

Slavin et al. disclose an automatic toll collection system (See Col. 2 Line 57-67) operating in conjunction with transponders provided for sale to the public and pre-approved for a predetermined amount of toll credit.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the automatic toll collection system with transponders as taught by Slavin et al. into the teachings of Imazuka in order to purchase a transponder from a vending machine and process payment at any toll plaza that would be convenient toll fee transaction.

Re claim 45, Imazuka disclose a gate system comprising a control center for ticket reservation, an automatic gate apparatus, a ticket vending machine (See Col. 2 Line 8-11) for

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issuing a magnetic ticket with assigned issue No. or ID No. (See Col. 7 Line 14-20), and a ticket issuing terminal through a wireless communication. The ticket vending machine includes a ticket processing terminal at a long-distance ticket vending window (See Fig. 4; Col. 4 Line 1-8) to display various data (Fig. 7) with additional purchasing function, an insert port (See Col. 4 Line 62-67) for a fare collected by a user, an exit port (See Col. 5 Line 16-29) for an issuing wireless IC card or magnetic ticket to a user, and a CPU (Fig. 4) to control the vending machine. For additional purchasing of tickets, there is a method to collect a fare by rewriting data (See Col. 4 Line 1-8) by a processing terminal.

However, Imazuka fails to teach an electronic toll collection device for paying toll at a toll facility.

Slavin et al. disclose an automatic toll collection system (See Col. 2 Line 57-67) operating in conjunction with transponders provided for sale to the public and pre-approved for a predetermined amount of toll credit.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the automatic toll collection system with transponders as taught by Slavin et al. into the teachings of Imazuka in order to purchase a transponder from a vending machine and process payment at any toll plaza that would be convenient toll fee transaction.

Re claim 51, Imazuka disclose a gate system comprising a control center for ticket reservation, an automatic gate apparatus, a ticket vending machine (See Col. 2 Line 8-11) for issuing a magnetic ticket with assigned issue No. or ID No. for confirmation of legal use (See Col. 7 Line 14-20), and a ticket issuing terminal through a wireless communication. The ticket

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vending machine includes a ticket processing terminal at a long-distance ticket vending window (See Fig. 4; Col. 4 Line 1-8) to display various data (Fig. 7) with additional purchasing, confirmation, and rewriting function (See Col. 4 Line 1-8), an insert port (See Col. 4 Line 62-67) for a fare collected by a user, an exit port (See Col. 5 Line 16-29) for an issuing wireless IC card or magnetic ticket to a user, and a CPU (See Fig. 4) to control the vending machine. For additional purchasing of tickets, there is a method to collect a fare by rewriting data (See Col. 4 Line 1-8) by a processing terminal.

However, Imazuka fails to teach an electronic toll collection device for paying toll at a toll facility.

Slavin et al. disclose an automatic toll collection system (See Col. 2 Line 57-67) operating in conjunction with transponders provided for sale to the public and pre-approved for a predetermined amount of toll credit.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the automatic toll collection system with transponders as taught by Slavin et al. into the teachings of Imazuka in order to purchase a transponder from a vending machine and process payment at any toll plaza that would be convenient toll fee transaction.

3. Claims 2-4, 7, and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 1 above, and further in view of Imazuka (U.S. patent No. 6,712,267).

Re claim 2, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the processing device provides the stored value by transmitting the stored value to the remote computer.

Imazuka discloses that a center communication controller transmits and receives updating data of a wireless card by controlling wireless communication with a ticket vending terminal (See Fig. 5; Col. 4 Line 20-38).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the wireless communication between a center controller and a vending terminal to transmit and receive updating data of a wireless card as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to indicate user's available amount to use the card to pass a toll gate for confirmation for a user.

Re claim 3, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a processing device and a remote computer comprises an Internet connection.

Imazuka discloses network communication between a center controller and a vending terminal to transmit and receive updating data (See Fig 2; Col. 4 Line 9-24).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the network between a center controller and a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide Internet connection as a kind of network method to transmit and receive network data for communicating in a wide area network.

Re claim 4, the teachings of Imazuka in view of Slavin et al. have been discussed above.



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However, Imazuka in view of Slavin et al. fails to teach a display, in electronic communication with the processing device, for guiding a user in purchasing the electronic toll collection device.

Imazuka discloses a display unit through an operation panel shows purchasable data, fare amount reserved on the central reservation control center, and updating data by a user (See Col. 4 Line 9-18).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the display unit through an operation panel for a user as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a display unit on a vending machine to show an option menu, stored amount, and directions to a user as a user interface for convenient transaction.

Re claim 7, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a payment acceptance device comprises a cash acceptor for accepting the payment in cash.

Imazuka discloses a fare insert port of a ticket vending machine for a user to insert a train fare (See Col. 4 Line 62-67).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the fare insert port of a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a fare insert port on a vending machine to receive and add the amount of fair by a user for easy purchasing an electronic toll collection device.

Re claim 10, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach an input device for receiving a number of an existing electronic toll collection device, wherein the processing device increases the stored value for the existing electronic toll collection device in accordance with the payment accepted by the payment acceptance device.

Imazuka disclose a ticket processing terminal at a vending window to have user to insert a ticket for additional purchasing of tickets (See Col. 4 Line 1-18) and refer the additional purchasing data to the central reservation control center (See Col. 4 Line 52-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to insert a ticket for additional purchasing and refer the data to the central reservation center as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the ticket processing terminal at a vending machine to receive a existing ticket and rewrite data on it for user that it would be good for reusing a user's ticket.

Re claim 11, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the input device comprises a user input device for manual input of the number.

Imazuka discloses a ticket processing terminal at a vending window to have user to input required additional contents for additional purchasing of tickets (See Col. 4 Line 1-8).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to input required additional contents as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in

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order to provide a processing terminal on a vending machine to have user to input additional amount of a electronic toll collection device for adding the fare flexibly.

Re claim 12, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a input device comprises a reader for automatically reading the number from the electronic toll collection device.

Imazuka discloses a wireless reader and writer at a ticket vending machine to communicate with a wireless card (See Col. 4 Line 12-17).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the wireless reader and writer at a vending machine to communicate with a wireless card as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a wireless reader and writer at a vending machine to read data from a electronic toll collection device when it is received by input device for easier communication and transaction between the toll collection device and the wireless reader and writer of a vending machine.

Re claim 13, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a bar code reader, in electronic communication with the processing device, for reading a bar code from a document and for transmitting information in the bar code to the processing device, wherein the processing device associates the information in the bar code with payment accepted by the payment acceptance device.

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Imazuka discloses a wireless reader and writer (See Col. 4 Line 9-18) to communicate with a wireless card as a reading means by checking if the card is valid or not, and to display the read current data on the display unit.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the reader and writer to communicate with a wireless card and to display the read current data as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the wireless reader and writer to a vending machine for reading data from a electronic toll collection device that input data could be accepted by central control unit for displaying the data and transaction well.

Re claim 14, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the dispenser comprises a dispenser for issuing motor vehicle tax or license decals.

Imazuka discloses a ticket vending machine to issue a ticket for a train fare from an exit port (See Col. 4 Line 62-67).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the exit port to issue a ticket at a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the exit port for issuing any kind of document, ticket, decal, and card to user from a vending machine for convenient purchasing in any place.

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4. Claims 5, 6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 1 above, and further in view of Newsome et al. (U.S. patent No. 6,595,416).

Re claim 5, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a display comprises a touch screen for both guiding the user and receiving commands from the user.

Newsome et al. disclose touch screen display that eliminates the need for selection buttons (See Col. 5 Line 44-50)

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the touch screen display as a selection method as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide a touch screen display to a vending machine that a user can choose option buttons without input amount manually for simple and easy-to-use transaction.

Re claim 6, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a key pad for receiving commands from the user.

Newsome et al. disclose a PIN keypad with a twelve key unit in a standard handset configuration (See Col. 6 Line 30-45).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the PIN keypad with a twelve key unit as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide a PIN keypad to a

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vending machine that a user could add personal identification number to the keypad connected to memory of control unit for a user to input ID number.

Re claims 8 and 9, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the payment acceptance device comprises a card reader for accepting the payment in electronic form through a card.

Newsome et al. disclose credit/debit payment reader for adding value and issuing transit fare cards (See Fig. 1; Fig. 2a).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ a credit/debit payment reader for adding value of fare cards as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide the credit/debit reader to an automatic vending machine to improve the overall mean cycle of transaction for easy to use.

5. Claims 16, 17, 20, and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 15 above, and further in view of Imazuka (U.S. patent No. 6,712,267).

Re claim 16, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a processing device and a remote computer comprises an Internet connection.

Imazuka discloses network communication between a center controller and a vending terminal to transmit and receive updating data (See Fig 2; Col. 4 Line 9-24).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the network between a center controller and a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide Internet connection as a kind of network method to transmit and receive network data for communicating in a wide area network.

Re claim 17, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a display, in electronic communication with the processing device, for guiding a user in purchasing the electronic toll collection device.

Imazuka discloses a display unit through an operation panel shows purchasable data, fare amount reserved on the central reservation control center, and updating data by a user (See Col. 4 Line 9-18).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the display unit through an operation panel for a user as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a display unit on a vending machine to show an option menu, stored amount, and directions to a user as a user interface for convenient transaction.

Re claim 20, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a payment acceptance device comprises a cash acceptor for accepting the payment in cash.

Imazuka discloses a fare insert port of a ticket vending machine for a user to insert a train fare (See Col. 4 Line 62-67).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the fare insert port of a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a fare insert port on a vending machine to receive and add the amount of fare by a user for easy purchasing an electronic toll collection device.

Re claim 23, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach an input device for receiving a number of an existing electronic toll collection device, wherein the processing device increases the stored value for the existing electronic toll collection device in accordance with the payment accepted by the payment acceptance device.

Imazuka disclose a ticket processing terminal at a vending window to have user to insert a ticket for additional purchasing of tickets (See Col. 4 Line 1-18) and refer the additional purchasing data to the central reservation control center (See Col. 4 Line 52-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to insert a ticket for additional purchasing and refer the data to the central reservation center as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the ticket processing terminal at a vending machine to receive an existing ticket and rewrite data on it for user that it would be good for reusing a user's ticket.

Re claim 24, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the input device comprises a user input device for manual input of the number.



Imazuka discloses a ticket processing terminal at a vending window to have user to input required additional contents for additional purchasing of tickets (See Col. 4 Line 1-8).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to input required additional contents as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a processing terminal on a vending machine to have user to input additional amount of a electronic toll collection device for adding the fare flexibly.

Re claim 25, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that an input device comprises a reader for automatically reading the number from the electronic toll collection device.

Imazuka discloses a wireless reader and writer at a ticket vending machine to communicate with a wireless card (See Col. 4 Line 12-17).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the wireless reader and writer at a vending machine to communicate with a wireless card as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a wireless reader and writer at a vending machine to read data from a electronic toll collection device when it is received by input device for easier communication and transaction between the toll collection device and the wireless reader and writer of a vending machine.

Re claim 26, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a processing device transmits the stored value to the accounting computer, and wherein the accounting computer stores the stored value.

Imazuka discloses that updating data at a vending machine is referred to the central reservation control center (See Col.4 Line 20-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the data updating method between a vending machine and a central reservation control center as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the data updating method to a vending machine and a central reservation control center that the control center reserve the data in the memory of processor for controlling overall amount of data.

Re claim 27, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach an input device for receiving a number of an existing electronic toll collection device, wherein the processing device transmits an instruction to the accounting computer to increase the stored value for the existing electronic toll collection device in accordance with the payment accepted by the payment acceptance device.

Imazuka disclose a ticket processing terminal at a vending window to have user to insert a ticket for additional purchasing of tickets (See Col. 4 Line 1-18) and refer the additional purchasing data to the central reservation control center (See Col. 4 Line 52-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to insert a ticket for

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additional purchasing and refer the data to the central reservation center as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the ticket processing terminal at a vending machine to receive a existing ticket and rewrite data on it for user that it would be good for reusing a user's ticket.

Re claim 28, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the accounting computer is in communication with a violation processing center and controls the violation processing center not to process a toll violation if the stored value is increased within a predetermined time period after the violation.

Imazuka discloses that the CPU of a ticket vending machine checks if a wireless card is valid or not when a wireless reader/writer works (See Col. 5 Line 45-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the checking method of card validation at the CPU of a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the validation checking method to the processor of a vending machine that it could reject an invalid toll collection device for better security control.

Re claim 29, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a bar code reader, in electronic communication with the processing device, for reading a bar code from a document and for transmitting information in the bar code to the processing device, wherein the processing device transmits the information in the bar code to the accounting computer for association with payment accepted by the payment acceptance device.

Imazuka discloses a wireless reader and writer to communicate with a wireless card as a reading means by checking if the card is valid or not, and to display the read current data on the display unit (See Col. 4 Line 9-18).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the reader and writer to communicate with a wireless card and to display the read current data as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the wireless reader and writer to a vending machine for reading data from a electronic toll collection device that input data could be accepted by central control unit for displaying the data and transaction well.

Re claim 30, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that an accounting computer is in communication with a toll facility at which the electronic toll collection device is usable for paying a toll, and wherein, when the electronic toll collection device is used at the toll facility, the accounting computer deducts the toll from the stored value.

Imazuka disclose an automatic gate apparatus for examining a ticket according to data of a magnetic ticket or a wireless ticket through a wireless communication with a ticket process terminal (See Fig. 5).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the automatic gate apparatus for examining data of a ticket and communicating with a process terminal as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the automatic gate apparatus as a toll gate apparatus to

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work with an electronic toll collection device by communicating with a central process unit for collecting and adjusting toll data.

Re claim 31, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that an accounting computer is in communication with a computer system operated for a public authority for collection of motor vehicle taxes or fees, and wherein the accounting computer communicates an amount of the payment accepted by the payment acceptance device to the computer system operated for the public authority.

Imazuka discloses that a ticket vending machine issues and adjusts a railway ticket, a limited express ticket, a reserved seat ticket, and a train fare, and a CPU of the vending machine judges whether it is a ticket of specific condition (See Col. 4 Line 62-Col. 5 Line 15)

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ a ticket vending machine issuing and adjusting a public transportation tickets and a CPU judges the validation of a ticket as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a method of issuing and adjusting a public validation to a vending machine that it could issue and adjust any public fares for having authority.

6. Claims 18, 19, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 15 above, and further in view of Newsome et al. (U.S. patent No. 6,595,416).

Re claim 18, the teachings of Imazuka in view of Slavin et al. have been discussed above.

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However, Imazuka in view of Slavin et al. fails to teach that a display comprises a touch screen for both guiding the user and receiving commands from the user.

Newsome et al. disclose touch screen display that eliminates the need for selection buttons (See Col. 5 Line 44-50)

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the touch screen display as a selection method as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide a touch screen display to a vending machine that a user can choose option buttons without input amount manually for simple and easy-to-use transaction.

Re claim 19, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a key pad for receiving commands from the user.

Newsome et al. disclose a PIN keypad with a twelve key unit in a standard handset configuration (See Col. 6 Line 30-45).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the PIN keypad with a twelve key unit as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide a PIN keypad to a vending machine that a user could add personal identification number to the keypad connected to memory of control unit for a user to input ID number.

Re claims 21 and 22, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that the payment acceptance device comprises a card reader for accepting the payment in electronic form through a card.

Newsome et al. disclose credit/debit payment reader for adding value and issuing transit fare cards (See Fig. 1; Fig. 2a).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ a credit/debit payment reader for adding value of fare cards as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide the credit/debit reader to an automatic vending machine to improve the overall mean cycle of transaction for easy to use.

7. Claims 33-35, 38, and 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 32 above, and further in view of Imazuka (U.S. patent No. 6,712,267).

Re claim 33, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach maintaining account information at a remote location regarding the electronic toll collection device and transmitting the stored value to the remote location for storage at the remote location.

Imazuka discloses a station control center of a central reservation center (See Fig. 5) is connected with a center communication controller that controls wireless communication (See Fig. 5; Col. 4 Line 29-38) with a ticket vending terminal for updating data of a wireless card.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ a station control center connected with a communication

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controller with vending terminals for updating data as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a central control to a toll collect network system to reserve and control the data in a remote processor for well managed collecting network system.

Re claim 34, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a processing device and a remote computer comprises an Internet connection.

Imazuka discloses network communication between a center controller and a vending terminal to transmit and receive updating data (See Fig. 2; Col. 4 Line 9-24).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the network between a center controller and a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide Internet connection as a kind of network method to transmit and receive network data for communicating in a wide area network.

Re claim 35, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a display guiding a user through the display in purchasing the electronic toll collection device.

Imazuka discloses a display unit through an operation panel shows purchasable data, fare amount reserved on the central reservation control center, and updating data by a user (See Col. 4 Line 9-18).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the display unit through an operation panel for a user as



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taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a display unit on a vending machine to show an option menu, stored amount, and directions to a user as a user interface for convenient transaction.

Re claim 38, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach automatically accepting the payment in cash.

Imazuka discloses a fare insert port of a ticket vending machine for a user to insert a train fare (See Col. 4 Line 62-67).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the fare insert port of a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a fare insert port on a vending machine to receive and add the amount of fare by a user for easy purchasing an electronic toll collection device.

Re claim 40, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach receiving a number of an existing electronic toll collection device, receiving additional payment, and increasing the stored value for the existing electronic toll collection device in accordance with the additional payment received.

Imazuka discloses a ticket processing terminal at a vending window to have user to insert a ticket for additional purchasing of tickets (See Col. 4 Line 1-18) and refer the additional purchasing data to the central reservation control center (See Col. 4 Line 52-57).

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Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to insert a ticket for additional purchasing and refer the data to the central reservation center as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the ticket processing terminal at a vending machine to receive a existing ticket and rewrite data on it for user that it would be good for reusing a user's ticket.

Re claim 41, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach receiving manual input of the number.

Imazuka discloses a ticket processing terminal at a vending window to have user to input required additional contents for additional purchasing of tickets (See Col. 4 Line 1-8).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to input required additional contents as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a processing terminal on a vending machine to have user to input additional amount of a electronic toll collection device for adding the fare flexibly.

Re claim 42, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach automatically reading the number from the electronic toll collection device.

Imazuka discloses a wireless reader and writer at a ticket vending machine to communicate with a wireless card (See Col. 4 Line 12-17).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the wireless reader and writer at a vending machine to communicate with a wireless card as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a wireless reader and writer at a vending machine to read data from a electronic toll collection device when it is received by input device for easier communication and transaction between the toll collection device and the wireless reader and writer of a vending machine.

Re claim 43, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach controlling a violation processing center not to process a toll violation if the stored value is increased within a predetermined time period after the violation.

Imazuka discloses that the CPU of a ticket vending machine checks if a wireless card is valid or not when a wireless reader/writer works (See Col. 5 Line 45-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the checking method of card validation at the CPU of a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the validation checking method to the processor of a vending machine that it could reject an invalid toll collection device for better security control.

Re claim 44, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach automatically deducting a toll from the stored value when the electronic toll collection device is used at a toll facility to pay the toll.

Imazuka discloses a fare adjustment for the riding at an automatic gate apparatus (See Col. 2 Line 8-17).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the fare adjustment at an automatic gate apparatus as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a fare adjustment method to a toll collection system to read and write data of a toll collection device through communication with central processing unit for managing fare collection account.

8. Claims 36, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 32 above, and further in view of Newsome et al. (U.S. patent No. 6,595,416).

Re claim 36, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach that a display comprises a touch screen for both guiding the user and receiving commands from the user, and wherein the method further comprises receiving the commands from the user through the touch screen.

Newsome et al. disclose touch screen display that eliminates the need for selection buttons (See Col. 5 Line 44-50)

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the touch screen display as a selection method as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide a touch screen display to a vending machine that a user can choose option buttons without input amount manually for simple and easy-to-use transaction.

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Re claim 37, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach a key pad for accepting commands from the user through the key pad.

Newsome et al. disclose a PIN keypad with a twelve key unit in a standard handset configuration (See Col. 6 Line 30-45).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the PIN keypad with a twelve key unit as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide a PIN keypad to a vending machine that a user could add personal identification number to the keypad connected to memory of control unit for a user to input ID number.

Re claim 39, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach automatically accepting the payment in electronic form through a card.

Newsome et al. disclose credit/debit payment reader for adding value and issuing transit fare cards (See Fig. 1; Fig. 2a).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ a credit/debit payment reader for adding value of fare cards as taught by Newsome et al. into the teachings of Imazuka in view of Slavin et al. in order to provide the credit/debit reader to an automatic vending machine to improve the overall mean cycle of transaction for easy to use.

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9. Claims 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imazuka (U.S. patent No. 6,712,267) in view of Slavin et al. (U.S. patent No. 5,819,234) as applied to claim 32 above, and further in view of Imazuka (U.S. patent No. 6,712,267).

Re claim 46, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach receiving manual input of the number from the user through the user interface.

Imazuka discloses a ticket processing terminal at a vending window to have user to input required additional contents for additional purchasing of tickets (See Col. 4 Line 1-8).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the ticket processing terminal to have user to input required additional contents as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a processing terminal on a vending machine to have user to input additional amount of a electronic toll collection device for adding the fare flexibly.

Re claim 47, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach automatically reading the identifying number from the electronic toll collection device.

Imazuka discloses a wireless reader and writer at a ticket vending machine to communicate with a wireless card (See Col. 4 Line 12-17).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the wireless reader and writer at a vending machine to communicate with a wireless card as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide a wireless reader and writer at a vending machine to read data

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from a electronic toll collection device when it is received by input device for easier communication and transaction between the toll collection device and the wireless reader and writer of a vending machine.

Re claim 48, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach controlling a violation processing center not to process a toll violation if the stored value is increased within a predetermined time period after the violation.

Imazuka discloses that the CPU of a ticket vending machine checks if a wireless card is valid or not when a wireless reader/writer works (See Col. 5 Line 45-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the checking method of card validation at the CPU of a vending machine as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order to provide the validation checking method to the processor of a vending machine that it could reject an invalid toll collection device for better security control.

Re claim 49, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach controlling a violation processing center to apply the payment accepted in a user interface to a toll violation.

Imazuka discloses that a CPU displays the read current data on the display unit when the reading data is invalid (See Col. 5 Line 45-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the method of displaying invalid data check on a display unit from a CPU as taught by Imazuka into the teachings of Imazuka in view of Slavin et al. in order

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to provide the display unit to a vending machine to notice an invalid message to a user for correct transaction.

Re claim 50, the teachings of Imazuka in view of Slavin et al. have been discussed above.

However, Imazuka in view of Slavin et al. fails to teach reading a bar code from a violation notice issued pursuant to the toll violation and communicating information in the bar code to the violation processing center.

Imazuka discloses that data is read by a wireless reader/writer and the CPU checks invalid wireless card (See Col. 5 Line 45-57).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the wireless reader/writer and a CPU to a vending machine to examine validation of a toll collection device for security of transaction.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cooke et al. (U.S. patent No. 6,758,370) disclose a dispensing mechanism of product vending providing for flat faced products.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Park whose telephone number is 571-272-2350. The examiner can normally be reached on 5:30am - 2:00pm (Monday - Friday).

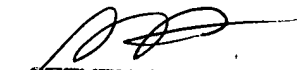


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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John J Park  
Examiner  
Art Unit 2876

  
**STEVEN S. PAIK**  
**PRIMARY EXAMINER**